

Appn. No. 10/026,871
Arndt, dated
Reply to Office action of June 19, 2003

REMARKS

Reconsideration of this application in light of the above amendments is courteously solicited.

Applicants hereby request the Examiner to reconsider his rejection of all of the claims as pending for the reasons set forth hereinbelow.

Initially the undersigned would like to thank Examiners Quarterman and Patel for the courtesies extended during an oral hearing held with the undersigned on September 9, 2003.

During the above noted oral hearing, the undersigned pointed out to Examiners Quaterman and Patel the defects in the rejection raised in the office action dated June 19, 2003. The Examiner rejected claims 1-14 under 35 U.S.C. 102 as being anticipated by U.S. Patent 6,472,765.

Applicant respectfully traverses this rejection.

U.S. Patent 6,742,765 is assigned to the assignee of the instant invention. In addition, the inventors in U.S. Patent 6,472,765 are the same inventors as in the instant application. U.S. Patent 6,472,765 is discussed on Page 1, first paragraph of the description of the prior art. The defect of U.S. Patent 6,472,765 is set forth in the last sentence of that paragraph. The present invention overcomes the defect mentioned therein. As set forth in current claim 1, the light permeable fluorescent cover according to the present invention is characterized by a new structural feature, that is, that the cover comprises a fluorescent material to produce second and third lights upon excitation by a first light emitted from a light emitting diode. In this regard, it should be noted that the present invention was made based on an important discovery that a specific fluorescent material has a transition characteristics that converts a single light received into two lights of difference wavelengths from that of the received light. Figure 4 shows an example of such a transition characteristics with lanthanoid aluminate selected as the fluorescent

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material that produces green and red lights with 0.4 to 0.8 manganic content ratio in transition range. Lanthanoid aluminate is sown as a single material by at least one selected from the following chemical formulae: $\text{LaAl}_{11}\text{O}_{16}:\text{Mn}^{2+}$; $\text{La}_2\text{O}_3\text{Al}_1\text{Al}_2\text{O}_3:\text{Mn}^{2+}$; $\text{La}_{1-x}\text{Al}_{11(2/9)+x}\text{O}_{19}:\text{Mn}^{2+}$ ($0.1 \leq x \leq 0.99$); $(\text{La}, \text{Ce})\text{Al}_{11}\text{O}_{19}:\text{Mn}^{2+}$; and $(\text{La}, \text{Ce})\text{MgAl}_{11}\text{O}_{19}:\text{Mn}^{2+}$. It is apparent that other fluorescent materials than lanthanoid aluminate can be used for the present invention if they indicate the conversion of a single light into two lights of different wavelengths to obtain a synthesized light as a result of mixture of three lights with excellent colorific balance.

Cited U.S. Patent No. 6,472,765 does not disclose, teach or suggest the transition characteristics of a single fluorescent material capable of converting wavelength of a single light into different two wavelengths. Accordingly, the Examiner's view that Sano discloses lanthanoid aluminates activated by manganese capable of converting wavelength of a single light into different two wavelengths (col. 5, lines 32-44 of the reference) is mere hindsight. There is absolutely no disclosure nor did the inventors of the '765 patent (again the same inventors) as the instant application) recognize or teach a single fluorescent material capable of converting wavelengths of a single light into two different wavelengths as claimed in independent claim 1. Accordingly, it is respectfully submitted that the Examiner's rejection is improper under both 35 U.S.C. 102 and/or 35 U.S.C. 103.

In addition to the foregoing, the Examiner raised in his office action certain objections to the drawings. In order to overcome those objections, Applicant submits concurrently herewith new Figures 9 and 10 for the Examiner's approval. The reference numeral "6d" has been deleted from both Figures 9 and 10. In addition, both Figures 9 and 10 have been designated as Prior Art. The Examiner is respectfully requested to approve the drawing corrections.

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In light of the foregoing, it is submitted that the instant application is now in condition for allowance and an early indication of same is respectfully requested.

An earnest and thorough attempt has been made by the undersigned to resolve the outstanding issues in this case and place same in condition for allowance. If the Examiner has any questions or feels that a telephone or personal interview would be helpful in resolving any outstanding issues which remain in this application after consideration of this amendment, the Examiner is courteously invited to telephone the undersigned and the same would be gratefully appreciated.

It is submitted that the claims as amended herein patentably define over the art relied on by the Examiner and early allowance of same is courteously solicited.

If any fees are required in connection with this case, it is respectfully requested that they be charged to Deposit Account No. 02-0184.

Respectfully submitted,

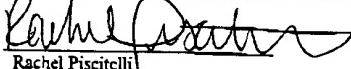
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Date: September 16, 2003

I hereby certify that this correspondence is being faxed this 16th day of September, 2003 to Examiner Quarterman, Art Unit 2879, at the United States Patent and Trademark Office (Fax No. 1-703-308-7382).


Rachel Piscitelli

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